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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Andrew B. Baker

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EXAMINER

GREIMEL, JOCELYN

ART UNIT

PAPER NUMBER

3693

MAIL DATE

DELIVERY MODE

08/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/014,919	Applicant(s) BAKER ET AL.	
	Examiner JOCELYN GREIMEL	Art Unit 3693	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-30 and 34-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-30 and 34-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/18/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This communication is in response to Applicant's Arguments and Remarks filed 23 August 2007, Supplemental Response filed 22 October 2007 and Argument and Remarks filed 18 April 2008.

Status of Claims

Claims 11-30 and 34-51 are currently pending. Claims 31-33 have been withdrawn. Claims 11, 17, 34, 37, 43 and 50 are independent claims. Claims 37-51 were newly added and will be evaluated on the merits for the first time.

Response to Arguments

1. Applicant's arguments filed 23 August 2007 have been fully considered but they are not persuasive. Applicants contend that the proposed invention utilizes a proposed schedule based on a fluctuation of resources. Pod creates schedules based on future workload volumes. The Examiner is entitled to give the claim limitations their broadest reasonable interpretation in light of the Specification (see below):

Claim Interpretation; Broadest Reasonable Interpretation:

<CLAIMS MUST BE GIVEN THEIR BROADEST REASONABLE INTERPRETATION

During patent examination, the pending claims must be "given the broadest reasonable interpretation consistent with the specification." Applicant always has the opportunity to amend the claims during prosecution and broad interpretation by the examiner reduces the

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possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541, 550-51 (CCPA 1969).>

A future workload volume can be seen as a fluctuation of resources. Therefore, Pod creates a proposed schedule based on a fluctuation of resources. In reference to Applicants argument that Pod does not transform one schedule into a different more cost-effective one, the Examiner respectfully disagrees. Pod at 0032+ teaches:

“the schedule may, if desired, provide the user with an actual representation of forecasted volume of work and the expected staffing requirements to perform work on the organization's behalf. The user may, if desired, apply a plurality of tools that enable costing of the forecasted volume of work and the expected staffing requirements required to perform work. Further, the user may, if desired, construct and apply a plurality of different scenarios reflecting at least one "what-if" condition. The constructed scenario may, if desired, be derived from actual historical transactions or from any selected condition that may affect the workload volume performed.”

The variety of scenarios the user can apply to create various schedules can be seen as transforming the schedules to create a most-effective schedule.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 11-30 and 34-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Podrazhansky (US Patent Pub. 2002/0052770).** In reference to claims 11, 17, 34, 37, 43 and 50 (new claims 37, 43 and 50), Podrazhansky discloses a method, system and apparatus for generating schedules of tasks including:

- a. data representative of tasks and resources for a project (0034-0035);
- b. generating a proposed schedule of tasks for the project responsive to fluctuations of resources utilized to perform the tasks (0034-0035);
- c. evaluating the proposed schedule to estimate an associated cost (0034-0335; 0044-0055);
- d. modifying the proposed schedule responsive to the resource fluctuations and the cost (0034-0335; 0044-0055); and

- e. outputting the modified proposed schedule for the project (0034-0335; 0044-0055).

For claims 37, 43 and 50, the claims are evaluated above and reference to the shipbuilding can be seen in at least 0030-0031 (also, please see Response to Arguments above).

2. In reference to claims 12-16 and 18-30 and 35-36, Podrazhansky discloses the following:

- f. wherein evaluating the proposed schedule to estimate the associated cost further comprises using a dynamic programming model (0051+);
- g. wherein evaluating the proposed schedule to estimate the associated cost further comprises using a linear programming model (0051+);
- h. wherein generating the proposed schedule includes associating a limitation with each of the resources and producing the proposed schedule responsive to each limitation (0046-0055);
- i. wherein generating the proposed schedule includes iteratively reducing the limitation for one of the resources and load-leveling the resources (col. 6, line 56 – col. 8, line 55);
- j. wherein evaluating the proposed schedule includes determining costs associated with the resource fluctuations (0044-0047; 0050-0055);
- k. wherein the costs associated with the resource fluctuations include at least one of the group of resource acquisitions costs, resource disposition costs,

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incremental costs for resource over-utilization, and incremental costs for resource under-utilization (0044-0047; 0050-0055);

l. wherein resource acquisition costs include a hiring cost (0053-0054);

m. wherein resource disposition costs include a firing cost (0053-0054);

n. wherein incremental costs for resource over-utilization include an overtime cost (0053-0054);

o. wherein incremental costs for resource under-utilization include an idle resource cost (0053-0054);

p. wherein generating the proposed schedule comprises identifying an admissible window in the proposed schedule for each task and iteratively placing each task within the proposed schedule responsive to the admissible window, a priority of the task, and a cost of at least part of the proposed schedule having the task placed therein (0054);

q. wherein evaluating the proposed schedule comprises examining one of the tasks to estimate the cost associated with the proposed schedule responsive to moving the task within a window describing allowable locations of the task in the schedule (0051-0054);

r. wherein the resource fluctuations are determined by using a profile for each of the resources (0053-0054).

In reference to new claims 38-42, 44 and 51,

- s. Wherein the tasks comprise welding, painting, electrical work, or any combination thereof (0030+);
- t. further comprising determining a minimum length schedule of tasks that uses at most a maximum number of resources to complete the tasks (0044+);
- u. wherein at least one of the tasks is subject to at least one constraint on the location of the task in the schedule (0044+);
- v. further comprising using a schedule packing algorithm (0053);
- w. further comprising determining for each of a plurality of tasks, each task having a plurality of possible start times, a start time for the task that results in a lowest estimated cost for the proposed schedule (0033+).

In reference to new claims 45-49, these claims mimic the language of previously presented claims (evaluated above) and are rejected under the same rationale. Please see evaluation above and Response to Arguments above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOCELYN GREIMEL whose telephone number is (571)272-3734. The examiner can normally be reached on Monday - Friday 8:30 AM - 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on (571) 272-6783. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jocelyn Greimel
Examiner, Art Unit 3693
August 17, 2008

/Stefanos Karmis/
Primary Examiner, Art Unit 3693